

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-30 (Cancelled)

31. (New) A liquid crystal display device, comprising:

a liquid crystal panel having a plurality of gate lines and data lines crossing each other, and having red, green and blue pixels arranged in a matrix pattern;

a gate driving unit for applying scan signals to the gate lines;

a lookup table for storing gray scale values of image information including R, G and B data, and storing a gray scale value of a bit of the B data prior to a bit at which a color reproducibility is reduced, as a gray scale value of bits from the bit at which a color reproducibility is reduced to an uppermost bit;

a data processing unit for compensating image information according to the gray scale value of the lookup table; and

a data driving unit for receiving the compensated image information and applying the compensated image information to the data lines.

32. (New) The LCD device of claim 31, wherein the gray scale value of the bit of the B data prior to a bit at which a color reproducibility is reduced is same as the gray scale value of the bits from the bit at which a color reproducibility is reduced to the uppermost bit.

33. (New) The LCD device of claim 31, wherein the B data has 64 bits.

34. (New) The LCD device of claim 31, wherein the bit at which a color reproducibility is reduced among the B data is a 52nd bit.

35. (New) The LCD device of claim 31, wherein the bit prior to a bit where a color reproducibility is reduced among the B data is a 51st bit.

36. (New) A method for improving a color reproducibility of a liquid crystal display (LCD) device, the method comprising:

detecting a gray scale value of a bit at which a color reproducibility is reduced, and a gray scale value of a bit prior to the bit at which a color reproducibility is reduced, by measuring a color displayed on a liquid crystal panel with increasing gray scale values of B data among image information including R, G and B data;

storing the gray scale value of the bit prior to the bit at which a color reproducibility is reduced, as a gray scale value of bits from the bit at which a color reproducibility is reduced to an uppermost bit;

compensating the image information according to the gray scale value; and
applying the compensated image information to data lines of the liquid crystal panel.

37. (New) The method of claim 36, wherein the gray scale value of the bit prior to the bit at which a color reproducibility is reduced is same as the gray scale value of bits from the bit at which a color reproducibility is reduced to the uppermost bit.

38. (New) The method of claim 36, wherein the B data has 64 bits.

39. (New) The method of claim 36, wherein the bit at which a color reproducibility is reduced among the B data is a 52nd bit.

40. (New) The method of claim 36, wherein the bit prior to a bit where a color reproducibility is reduced among the B data is a 51st bit.